

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/075,150	02/14/2002		Harri Pekonen	04770.00040	6898		
22907	7590	07/12/2005		EXAM	EXAMINER		
BANNER &			PHILPOTT,	PHILPOTT, JUSTIN M			
SUITE 1100			ART UNIT	PAPER NUMBER			
WASHINGT	ON, DC	20001	2665				

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

					(X				
		Application	No.	Applicant(s)					
		10/075,150		PEKONEN, HARRI					
	Office Action Summary	Examiner		Art Unit	,				
		Justin M. Phil	•	2665					
 Period for	The MAILING DATE of this communicate Reply	tion appears on the co	over sheet with the co	rrespondence add	Iress				
- THE M - Extens after S - If the p - If NO p - Failure Any re	PRTENED STATUTORY PERIOD FOR IAILING DATE OF THIS COMMUNICA ions of time may be available under the provisions of 37 IX (6) MONTHS from the mailing date of this communic eriod for reply specified above is less than thirty (30) date of or reply is specified above, the maximum statutor to reply within the set or extended period for reply will, ply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	TION. 7 CFR 1.136(a). In no event, ation. 1ys, a reply within the statutory prioriod will apply and will ex by statute. cause the applicat	however, may a reply be time y minimum of thirty (30) days pire SIX (6) MONTHS from th	ly filed will be considered timely. e mailing date of this cor	mmunication.				
Status				·					
1) 🛛 🖪	Responsive to communication(s) filed o	on <i>16 May 2005</i> .							
	• •	☐ This action is non-	-final.		• •				
Dispositio	n of Claims				:				
5)□ 0 6)⊠ 0 7)□ 0	Claim(s) 1-51 is/are pending in the appl a) Of the above claim(s) is/are v Claim(s) is/are allowed. Claim(s) 1-51 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction	vithdrawn from consi		·					
Applicatio	n Papers				į.				
9)∐ T	he specification is objected to by the Ex	xaminer.							
	he drawing(s) filed on is/are: a)		objected to by the E:	xaminer.					
	Applicant may not request that any objection								
	Replacement drawing sheet(s) including the he oath or declaration is objected to by								
		the Examiner. Note	the attached Office A	ction of follit FTC	J-132.				
	nder 35 U.S.C. § 119				. •				
a)	cknowledgment is made of a claim for the control of the priority doces. Certified copies of the priority doces. Certified copies of the priority doces. Copies of the certified copies of the application from the International see the attached detailed Office action for	cuments have been re cuments have been re he priority documents Bureau (PCT Rule 1	eceived. eceived in Applications have been received 7.2(a)).	n No I in this National S	Stage				
Attacher									
Attachment(: 1) \textsquare Notice	s) of References Cited (PTO-892)	41	Intervious Comments (1	PTO 4131					
2) Notice	of Draftsperson's Patent Drawing Review (PTO-9		Interview Summary (F Paper No(s)/Mail Date	e ·					
	ation Disclosure Statement(s) (PTO-1449 or PTO No(s)/Mail Date <u>20050315</u> .		Notice of Informal Pat Other:	ent Application (PTO-	152)				

Art Unit: 2665

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed May 16, 2005 have been fully considered but they are not persuasive.

Specifically, applicant argues (pages 11-13) that Yano does not teach applicant's interpretation of the recently added limitation in applicant's claim 1. However, it remains undisputed by applicant that Yano clearly teaches allowing a receiver to enter a reduced power-consumption state for a duration based upon received information (e.g., see page 11 of applicant's remarks filed May 16, 2005). Further, the reduced power-consumption state occurs between receiving a current and subsequent burst of packets (e.g., see Yano, col. 5, line 57 - col. 6, line 14; and col. 6, lines 38-59). Thus, whether claim 1 is interpreted, as previously discussed by Examiner in the office action of February 16, 2005, to comprise receiving the time based parameter between the current and subsequent burst of packets, or is instead interpreted as preferred by applicant in the instant response to comprise a parameter which is not received between current and subsequent bursts of packets, Veschi in view of Yano still teaches the limitations as recited in applicant's claim 1. That is, Yano teaches a parameter (e.g., within DPCCH, see FIG. 5) is received which allows the receiver to enter a reduced power-consumption state for a duration (e.g., see col. 5, line 57 – col. 6, line 14; and col. 6, lines 38-59) between a current burst of packets (e.g., DPDCH data in a first slot of a frame) and a subsequent burst of packets (e.g., DPDCH data in a subsequent slot). Accordingly, despite applicant's unclear language recited in claim 1, both applicant's preferred interpretation and Examiner's

Art Unit: 2665

interpretation are taught by the cited prior art. Thus, applicant's argument that Yano does not teach the recently added limitation in applicant's claim 1 is not persuasive.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,923,655 to Veschi et al. in view of U.S. Patent No. 6,807,235 to Yano et al.

Regarding claims 1, 14, 24, 30, 38 and 43, Veschi teaches a time-slicing digital video broadcasting transmitter system and method comprising: a buffer (e.g., queue of packets in Ethernet controller, see col. 10, lines 31-36) that receives at least one of digital video content and digital audio content from an information service provider (e.g., server 160, see col. 9, lines 35-39); and encapsulator (e.g., packet assembly circuit within processor 210) that receives the buffered content from the buffer and that forms at least one packet header (e.g., header 310) for a current packet of a current burst of packets (e.g., see col. 10, lines 27-36 regarding packet assembly circuit), wherein the current packet contains a first portion of the buffered content (e.g., see col. 13, lines 34-42 regarding sample 380), wherein the at least one packet header contains time-slice information (e.g., position identifier 370) that includes a time-slice parameter specifying a relationship between the current packet of the current burst of packets (e.g., audio video sample 380, one of samples 1-5 in FIG. 5) and a subsequent burst of packets that contains

Art Unit: 2665

a second portion of the buffered content (e.g., one of other samples, see col. 13, lines 42-44 and col. 14, lines 9-19); and a digital video broadcast transmitter (e.g., Ethernet controller 206) that transmits the current burst of packets and the subsequent burst of packets (e.g., see col. 9, lines 56-63). Further, regarding claims 14, 24 and 38, Veschi teaches a corresponding receiver to the above-mentioned digital video broadcasting transmitter system, comprising a buffer (e.g., receiving buffer 510) and an application processor (e.g., packet disassembly circuit) for extracting information specifying a relationship between the current packet of the current burst of packets and the subsequent burst of packets (e.g., see col. 16, lines 12-30).

However, Veschi may not specifically disclose a parameter received allows the receiver to enter a reduced power-consumption state for a duration.

Yano also teaches a communications system and, specifically, teaches a parameter (e.g., within DPCCH, see FIG. 5) received allows the receiver to enter a reduced power-consumption state for a duration (e.g., see col. 5, line 57 – col. 6, line 14; and col. 6, lines 38-59) between a current burst of packets (e.g., DPDCH data in a first slot of a frame) and a subsequent burst of packets (e.g., DPDCH data in a subsequent slot). The teachings of Yano provide transmission operation with the improvement of reduced power consumption (e.g., see col. 2, lines 60-67). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to implement the teachings of Yano within the system of Veschi in order to provide operation with the improvement of reduced power consumption (e.g., see col. 2, lines 60-67).

Regarding claims 2, 20, 25, 31, 39, 44 and 48, Veschi teaches the time-slice information specifies, in a way that is independent of a number of data packet-

Art Unit: 2665

transmission intervals, an amount of time that elapses between transmission of the current packet and transmission of a first-transmitted packet of the subsequent burst of packets (e.g., see FIG. 5 regarding particular time intervals and see Table 1 in col. 14 regarding length of time in ms corresponding to position identifiers; see also col. 13, line 33 – col. 16, line 55).

Regarding claims 3 and 34, Veschi teaches the time-slice information (e.g., position identifier 370) specifies a time-slice duration for transmitting the current burst of packets (e.g., see Table 1 in col. 14 regarding duration/length of time in ms in combination with packet delay in ms).

Regarding claims 4 and 32, Veschi teaches the time-slice information includes a time-slice index for numbering originally transmitted bursts of packets (e.g., see Table 1 in col. 14 regarding position identifier).

Regarding claim 5, the buffer of Veschi is inherently large enough to store at least two full bursts of data from the information service provider and any data to be transmitted between transmission of the two full bursts of data (e.g., see col. 10, lines 32-36 regarding queuing data packets having position identifiers).

Regarding claim 6, Veschi teaches the amount of time that elapses between transmitting the current packet and transmitting the first-transmitted packet of the subsequent burst is determined based at least in part upon how many packets will be transmitted between transmitting the current packet and transmitting the subsequent packet (e.g., see Table 1 in col. 14 regarding times in ms, sample number, and position identifier).

Art Unit: 2665

Regarding claim 7, Veschi teaches the amount of time that elapses between transmitting the current packet and transmitting the first-transmitted packet of the subsequent burst is determined based at least in part upon an amount of transmitter-idle time between transmission bursts (e.g., see Table 1 in col. 14 regarding delay of each packet in ms).

Regarding claim 8, this claim was rejected in the previous office action by the Examiner taking official notice that the limitations recited in these claims are well known in the art. That is, elastic, FIFO, ring and dual buffers are all well known in the art as available buffer types. In Applicant's response to a previous office action, Applicant has not traversed the Examiner's assertion of official notice or Applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to utilize elastic, FIFO, ring and/or dual buffers since such buffers are all well known in the art as available buffer types.

Regarding claims 9, 19, 21, 26, 27, 33, 35, 40, 45 and 49, while Veschi may not specifically disclose the encapsulator places the time-slice information (e.g., position identifier 370) into lower layer protocol packet header bits, Veschi rather discloses the time-slice information is provided within message 330 (e.g., see FIG. 3). However, it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to shift the location of the position identifier 370 from message portion 330 to header portion 310 (see FIG. 3) since it is

Art Unit: 2665

generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. The contention of obvious choice in design can be overcome if Applicant establishes unexpected results. In re Japikse, 86 USPQ 70 (CCPA 1950).

Regarding claims 10, 22, 28, 36, 41, 46 and 50, these claims were rejected in the previous office action by the Examiner taking official notice that the limitations recited in these claims are well known in the art. That is, DVB DSM-CC protocol is well known in the art to provide digital video broadcast. In Applicant's response to a previous office action, Applicant has not traversed the Examiner's assertion of official notice or Applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to utilize the DVB DSM-CC section protocol since such a protocol is well known in the art to provide digital video broadcast.

Regarding claims 11, 23, 29, 37, 42, 47 and 51, while Veschi in view of Yano may not specifically disclose time-slice information (e.g., position identifier 370) is placed into at least one byte reserved but not used for media access control addressing, Veschi suggests such a feature by providing reserved/length field 340 comprising at least one reserved byte for media access control addressing (e.g., see col. 11, line 1 – col. 12, line 30). Furthermore, while Veschi may not specifically disclose the position identifier is placed in the reserved field 340, it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art

Art Unit: 2665

to shift the location of the position identifier from field 370 to field 340 since it is generally considered to be within the ordinary skill in the art to shift the location of parts absent a showing of unexpected results. The contention of obvious choice in design can be overcome if Applicant establishes unexpected results. In re Japikse, 86 USPQ 70 (CCPA 1950).

Regarding claims 12, 13 and 15-18, these claims were rejected in the previous office action by the Examiner taking official notice that the limitations recited in these claims are well known in the art. That is, indexes of decreasing or increasing order or first/last packet indications are well known in the art of transmitting packet bursts. In Applicant's response to a previous office action, Applicant has not traversed the Examiner's assertion of official notice or Applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to implement indexes of decreasing or increasing order or first/last packet indications, since such indexes and first/last packet indications are well known in the art of transmitting packet bursts.

Regarding claims 19, 26 and 33, while Veschi in view of Yano may not specifically disclose including an indication of whether the burst of packets is an original burst or a copy burst, these claims were rejected in the previous office action by the Examiner taking official notice that the limitations recited in these claims are well known in the art. That is, including an indication of whether the burst of packets is an original burst or a copy burst is well known in the art. In Applicant's response to a previous

Art Unit: 2665

office action, Applicant has not traversed the Examiner's assertion of official notice or Applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art. Accordingly, at the time of the invention it would have been obvious to one of ordinary skill in the art to transmit copy bursts and include indications of whether a burst is an original or a copy since such an implementation is well known in the art.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

Application/Control Number: 10/075,150 Page 10

Art Unit: 2665

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on 571.272.3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin M Philpott

HUY D. VU SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600